

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1811	((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/147) or (257/148) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/21 15:37
L2	0	1 and (field adj stop stop adj zone) and emitter and valence adj band and conductance adj band	EPO; DERWENT	OR	ON	2007/04/21 15:40
L3	0	1 and (field adj stop stop adj zone)	EPO; DERWENT	OR	ON	2007/04/21 15:39
L4	1	1 and (field adj stop stop adj zone) and emitter and valence adj band and conductance adj band	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/21 15:40
L5	1	(siemens.as. (josef\$1georg near1 bauer).in. (brunner near1 heinrich). in. (schulze near1 hans\$1joachim). in.) and (field adj stop stop adj zone) and emitter and valence adj band and conductance adj band	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/21 15:42

EAST Search History

S1	174	<p>(US-5291040-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5311042-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5429953-\$ or US-5401985-\$ or US-5444272-\$ or US-5477064-\$ or US-5486709-\$ or US-5491351-\$ or US-5710445-\$ or US-5719413-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6104043-\$ or US-6049108-\$ or US-6020623-\$ or US-5796124-\$ or US-6242766-\$ or US-6268639-\$). did. or (US-6271545-\$ or US-6274892-\$ or US-6313485-\$ or US-6380569-\$ or US-6407412-\$ or US-6420774-\$ or US-6437383-\$ or US-6501099-\$ or US-6555848-\$ or US-6734462-\$ or US-6703647-\$ or US-6756612-\$ or US-5065211-\$ or US-4963972-\$ or US-4969028-\$ or US-4851889-\$ or US-4910573-\$ or US-4825266-\$ or US-4559551-\$ or US-4520552-\$ or US-4107731-\$ or US-4089024-\$ or US-4081818-\$ or US-4053921-\$ or US-4040170-\$ or US-3988771-\$ or US-3739236-\$). did. or (US-3697827-\$ or US-3577046-\$ or US-3470036-\$ or US-3337782-\$ or US-5629535-\$ or US-5757033-\$ or US-5144401-\$ or US-5204541-\$ or US-5457329-\$ or US-5483087-\$ or US-5550392-\$ or US-5591991-\$ or US-6441408-\$ or US-6703294-\$ or US-6696705-\$ or US-6218217-\$ or US-5498884-\$ or US-5504351-\$ or US-5525816-\$ or US-5543639-\$ or US-5528058-\$ or US-5569941-\$ or US-5684306-\$ or US-5659185-\$ or US-5705835-\$ or US-5262336-\$ or US-5245202-\$). did. or (US-5202750-\$ or US-5151766-\$ or US-5124772-\$ or US-5083185-\$ or US-5068704-\$ or US-5464994-\$ or US-5461242-\$ or US-5444271-\$ or US-5539217-\$ or US-5471075-\$ or US-5610415-\$ or US-5587594-\$ or US-5574297-\$ or US-5644150-\$ or US-5637888-\$ or US-5668385-\$ or US-5661314-\$ or US-5793066-\$ or US-5684323-\$ or US-5682044-\$ or US-5679966-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-6043112-\$ or US-5936267-\$ or US-5981981-\$). did. or (US-6111290-\$ or US-6054728-\$ or US-6198115-\$ or US-6169299-\$ or US-6660569-\$ or US-6778140-\$ or US-4719870-\$ or </p>	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/11 11:13
4/21/07	3:42:22 PM	H:\Backup_old_East\09761240.wsp			Page 2	

EAST Search History

S2	1	S1 and gerstenmaier.in.	EPO; DERWENT	OR	OFF	2004/08/11 11:13
S3	157	257/144	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 10:06
S4	247	257/152	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/08 10:54
S5	172	257/163	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/08 10:54
S6	117	257/164	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/08 10:56
S7	76	257/165	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/08 10:54
S8	616	(257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19980717"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 12:46
S9	4	((257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19980717") and (selenium or sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/08 12:10
S10	616	(257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19980717"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/08 13:49
S11	576	(257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19970717"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 13:54

EAST Search History

S12	169	((257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19970717") and (stop\$5 or buffer\$3 or phosphor\$2 or arsenic)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 14:38
S13	5	stop\$4 adj2 buffer and thyristor\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 14:38
S14	25	((257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19970717") and (stop\$5 or buffer\$3) and (phosphor\$2 or arsenic)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 15:00
S15	5	energy adj level\$1 near (phosphorus or arsenic or selenium or sulfur) near dop\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 15:47
S16	1	ionization adj energy near (phosphorus or arsenic or selenium or sulfur) near dop\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 16:42
S17	292	(sulfur with selenium) and "257"/\$3.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 07:40
S18	57	(sulfur with selenium) and "257"/\$3.ccls. and emitter\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 16:49
S19	89	(sulfur with selenium) and "257"/\$3.ccls. and band adj gap	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 16:52
S20	14	((sulfur with selenium) and "257"/\$3.ccls. and emitter\$1) and ((sulfur with selenium) and "257"/\$3.ccls. and band adj gap)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 18:56
S21	4	(((sulfur with selenium) and "257"/\$3.ccls. and emitter\$1) and ((sulfur with selenium) and "257"/\$3.ccls. and band adj gap)) and dopant and (buffer or stop\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 07:34

EAST Search History

S22	2	ionization adj energ\$3 with sulfur with (dopant or impurit\$3 or foreign)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 17:07
S23	37	dopant and (selenium or sulfur) and emitter and (buffer adj layer or stop\$4 adj zone)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 17:59
S24	0	(buffer adj layer or stop\$4 adj zone) same dopant same (selenium or sulfur) same ionization adj energ\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 18:01
S25	0	(buffer adj layer or stop\$4 adj zone) same (selenium or sulfur) same ionization adj energ\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 18:01
S26	3	(dopant or impurit\$3) same (selenium or sulfur) same ionization adj energ\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 18:02
S27	7	buffer adj layer with dopant with (sulfur or selenium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 18:26
S28	0	stop adj zone with dopant with (sulfur or selenium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 18:26
S29	7	((sulfur with selenium with dopant) and "257"/\$3.ccls. and emitter\$1) and ("257"/\$3.ccls. and band adj gap)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/10 18:56
S30	44720	ionization energ\$3 with sulfur with selenium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 07:42
S31	44672	ionization energ\$3 with sulfur with selenium with dopant\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 07:42

EAST Search History

S32	1	ionization adj energ\$3 with sulfur with selenium with dopant\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 07:43
S33	2	"5574297".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 07:55
S34	2	"5359220".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 08:02
S35	3	"5528058".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 08:03
S36	1686	dopant with phosphorus with type	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 08:04
S37	1454	dopant with phosphorus with n adj2 type	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 08:07
S38	205	dopant with phosphorus with n+	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 08:10
S39	131	(dopant with phosphorus with n+) and @pd<"19970717"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2001/06/11 08:11
S40	738	257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/26 18:35
S41	1	(257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and ((stop adj zone near15 active) near15 (off-state or off adj state))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/26 18:39

EAST Search History

S42	1	(257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and ((stop\$4 adj zone near15 active) near15 (off-state or off adj state))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/26 18:41
S43	1	(257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and ((zone near15 active) near15 (off-state or off adj state))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/26 19:11
S44	3	"5528058".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:26
S45	3	"5357130".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 12:44
S46	0	stop\$4 adj zone same dopant same (ON-state or OFF-state or "on state" or "off state")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 12:48
S47	31	dopant near12 ionization adj energy	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 12:58
S48	5	(igbt or mct).ti,ab. and ((dopant or impurity or impurities) near12 (indium or tellurium))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 13:11
S49	9	semiconductor.ti,ab. and ((dopant or impurity or impurities) same (indium or tellurium) same ionization)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:21
S50	0	((sulfur or selenium) near12 "on-state voltage") same (dopant or impurit\$3)) and semiconductor.ti, ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:23
S51	5	((sulfur or selenium) near12 ("on-state" or voltage) same (dopant or impurit\$3)) and semiconductor.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:27

EAST Search History

S52	0	((sulfur or selenium) near12 (ionization adj (energy or potential))) near12 (impurit\$3 or dop\$3) same ((on-state or on adj state) adj2 voltage)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:31
S53	2	((sulfur or selenium) near12 (ionization adj (energy or potential))) near12 (impurit\$3 or dop\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:46
S54	0	((selenium or sulfur) near12 on-state adj voltage) and (thyristor or mct or igt).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:48
S55	35	(selenium or sulfur) and (thyristor or mct or igt).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:48
S56	2	((selenium or sulfur) same (dopant or impurit\$3)) and (thyristor or mct or igt).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 14:49
S57	40	((blocking or stop\$4) adj2 (zone or layer) same emitter) and thyristor. ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:28
S58	13	((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage and thyristor.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:29
S59	0	(((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage same on-state) and thyristor.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:30
S60	0	(((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage same "on") and thyristor.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:30
S61	5	(((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage) and thyristor.ti,ab. and power	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:32

EAST Search History

S62	1	((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage and thyristor.ti,ab. and power and (dopant or impurit\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:49
S63	3	"5710445".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:54
S64	1	((selenium or sulfur) near12 (dopant or impurity)) and thyristor. ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:56
S65	0	((selenium or sulfur) near12 ionization adj (potential or energy)) and thyristor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:57
S66	0	((selenium or sulfur) near12 ionization adj (potential or energy)) and barrier adj layer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:58
S67	20	(selenium or sulfur) near12 ionization adj (potential or energy)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 15:58
S68	2	(selenium or sulfur) near12 ionization adj (potential or energy) and semiconductor.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:02
S69	1	(selenium or sulfur) near12 ionization adj (potential or energy) and (igbt or thyristor or mosfet) and semiconductor.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:04
S70	2	(selenium or sulfur) near12 ionization adj (potential or energy) and (igbt or thyristor or mosfet or semiconductor).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:05
S71	27	((selenium or sulfur) near12 (barrier adj layer)) and (igbt or thyristor or mosfet or semiconductor).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:06

EAST Search History

S72	9	((selenium or sulfur) near5 (barrier adj layer)) and (igbt or thyristor or mosfet or semiconductor).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:11
S73	0	((selenium or sulfur) near5 (barrier adj layer)) and (igbt or mosfet or semiconductor).ti,ab. and thyristor.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:08
S74	0	((selenium or sulfur) near5 (barrier adj layer)) and thyristor.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:08
S75	0	((selenium or sulfur) near5 (barrier adj layer)) and thyristor.ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:09
S76	0	((selenium or sulfur) near5 (barrier adj layer)) and (mct or thyristor or igt).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:09
S77	1	((selenium or sulfur) near5 (dopant or impurity) near5 (barrier adj layer))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:12
S78	0	((selenium or sulfur) near5 (dopant or impurity) near5 (barrier adj layer)) and silicon adj substrate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:13
S79	71	((selenium or sulfur) near5 (dopant or impurity)) and silicon adj substrate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:14
S80	3	((selenium or sulfur) near5 (dopant or impurity)) and ionization adj (energy or potential) and silicon adj substrate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:24
S81	15	(low-noise or low adj noise) adj2 semiconductor and power adj2 semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:26

EAST Search History

S82	33	((low-noise or low adj noise) near5 power) near5 semiconductor).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:28
S83	0	((low-noise or low adj noise) near5 power) near5 semiconductor).ti,ab. and thyristor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:28
S84	3	((low-noise or low adj noise) near5 power) near5 semiconductor adj device).ti,ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 16:30
S85	25	((low-noise or low adj noise) near5 power).ti,ab. and "257"/\$6.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 17:05
S86	2	((low-noise or low adj noise) near5 power).ti,ab. and "257"/\$6.ccls. and (thyristor or igt or insulated gate adj bipolar adj transistor or mct)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 15:26
S87	2	jp-02105578\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/01/27 17:06
S88	458	stop adj zone	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 16:36
S89	2	(stop adj zone) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 16:36
S90	586	((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/01 20:30

EAST Search History

S91	60	buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 17:19
S92	29	(buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 17:20
S93	0	((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se) and (buffer near12 (selenium or se or s or sulfur)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 17:21
S94	3	((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se) and (buffer same (selenium or se or s or sulfur)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 17:25
S95	0	((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se) and (buffer same (selenium or se or sulfur)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 17:23
S96	0	((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)) and ((buffer near15 (dop\$3 or impurit\$3)) same ioniz\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 17:27
S97	0	((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)) and ((buffer near15 (selenium or sulfur)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 17:28

EAST Search History

S98	77	(US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.	US-PGPUB; USPAT; JPO	OR	OFF	2002/05/02 11:40
-----	----	--	----------------------------	----	-----	------------------

EAST Search History

S99	2	((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$). did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and ionization	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 20:34
-----	---	---	---	----	----	------------------

EAST Search History

S10 0	1	((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (energy adj level or band adj2 gap)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 20:43
----------	---	--	---	----	----	------------------

EAST Search History

S10 1	0	((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$). did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) near20 (indium or tellurium or selenium or sulfur or in or se)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 20:45
----------	---	---	---	----	----	------------------

EAST Search History

S10 2	2	((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$). did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (indium or tellurium or selenium or sulfur or in or se)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 20:49
----------	---	--	---	----	----	------------------

EAST Search History

S10 3	2	((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$). did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (indium or tellurium or selenium of sulfur or in or se or te)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 20:50
----------	---	--	---	----	----	------------------

EAST Search History

S10 4	0	((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$). did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (band near2 gap)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 20:50
----------	---	---	---	----	----	------------------

EAST Search History

S10 5	1	((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$). did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$). did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$). did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and energy adj level	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/01 20:51
S10 6	457	foreign adj atom	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 09:36
S10 7	58	foreign adj atom and "257"/\$6.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 09:37

EAST Search History

S10 8	3447	stop\$4 adj (zone or region or layer or film) and "257"/\$6.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 09:40
S10 9	2240	(stop or stopping) adj (zone or region or layer or film) and "257"/\$6.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 09:41
S11 0	30	(stop or stopping) adj zone and "257"/\$6.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 11:37
S11 1	8	(stop or stopping) adj zone and "257"/\$6.ccls. and thyristor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 09:44

EAST Search History

S11 2	77	(US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$). did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$). did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$). did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did.	US-PGPUB; USPAT; JPO	OR	OFF	2002/05/02 11:39
----------	----	--	----------------------------	----	-----	------------------

EAST Search History

S11 3	77	(US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$). did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$). did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$). did.	US-PGPUB; USPAT; JPO	OR	OFF	2002/05/02 11:39
----------	----	--	----------------------------	----	-----	------------------

EAST Search History

S11 4	18	((US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$). did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$). did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$). did.) and ((dop\$3 or impurit\$3 or donor or acceptor) near12 (carbon or c or titanium or ti or se or selenium or cr or chromium or ta or tantalum or cs or cesium or ba or barium or sulfur or s or manganese or mn or pt or platinum or au or gold or silver or ag))	US-PGPUB; USPAT; JPO	OR	OFF	2002/05/02 13:24
----------	----	---	----------------------------	----	-----	------------------

EAST Search History

S11 5	3	("3953243").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/02 13:05
S11 6	0	((US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$). did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$). did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$). did.) and (((barium or cesium) near12 (dop\$3 or impurit\$3)) near12 thyristor)	US-PGPUB; USPAT; JPO	OR	OFF	2002/05/02 13:26

EAST Search History

S11 7	3	((US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$). did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$). did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$). did. or (US-20010005024-\$ or US-20020024056-\$). did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$). did.) and (silicon adj substrate near12 thyristor)	US-PGPUB; USPAT; JPO	OR	OFF	2002/05/02 14:32
S11 8	2	("6043112").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/02 14:33
S11 9	2	("6043112").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/05/02 15:27

EAST Search History

S12 0	1421	emitter and igt and power and switching	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 15:28
S12 1	40	emitter adj region and igt.ti,ab. and power adj2 device and switching	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/05/02 15:29

EAST Search History

S12 2	105	(US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5569941-\$ or US-5539217-\$ or US-5543639-\$ or US-5528058-\$ or US-5679966-\$ or US-5684306-\$ or US-5637888-\$ or US-5587594-\$ or US-5610415-\$ or US-5336907-\$ or US-5719413-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5407491-\$ or US-5574297-\$ or US-5659185-\$ or US-5661314-\$). did. or (US-5644150-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5710445-\$ or US-5705835-\$ or US-RE32784-\$ or US-4963972-\$ or US-5429953-\$ or US-5457329-\$ or US-5401985-\$ or US-5471075-\$ or US-5464994-\$ or US-5477064-\$ or US-4760431-\$ or US-5486709-\$ or US-5498884-\$ or US-5504351-\$). did. or (US-5525816-\$ or US-5444272-\$ or US-5444271-\$ or US-5461242-\$ or US-5412228-\$ or US-4062032-\$ or US-4717940-\$ or US-5381026-\$ or US-5381025-\$ or US-4053921-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5359220-\$ or US-5068704-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-3470036-\$ or US-4032958-\$ or US-5304821-\$ or US-4851889-\$ or US-5293054-\$ or US-3337782-\$ or US-5245202-\$ or US-5210432-\$ or US-5319222-\$). did. or (US-5065211-\$ or US-5319221-\$ or US-4914496-\$ or US-5306930-\$ or US-5306929-\$). did. or (US-20010005024-\$). did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$). did. or (JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-06061479-\$). did. or (US-5710445-\$ or EP-1017093-\$ or US-4642669-\$ or US-5079175-\$ or DE-19909105-\$ or DE-3932490-\$). did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2002/11/21 16:42
4/21/07 H:\Backup_old_East\09761240.wsp	3:42:22 PM				Page 28	

EAST Search History

S12 3	617	((257/144) or (257/152) or (257/163) or (257/164) or (257/165) or (257/110)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/11/22 09:30
S12 4	4	(((257/144) or (257/152) or (257/163) or (257/164) or (257/165) or (257/110)).CCLS.) and (sulfur or selenium or s or se) near15 (doping or dopant or impurities or impurity or implant or implantation or band adj gap or band adj edge or energy adj level or ionization or ionisation)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/08/10 20:45
S12 5	1	(((257/144) or (257/152) or (257/163) or (257/164) or (257/165) or (257/110)).CCLS.) and (sulfur or selenium or se) near15 (doping or dopant or impurities or impurity or implant or implantation or band adj gap or band adj edge or energy adj level or ionization or ionisation)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2002/11/22 15:03
S12 6	3	("5602048").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2002/11/22 15:03
S12 7	0	("stopadjzonenear12block\$3near2(voltageorpotentialorelectricadjfield)").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/04/14 15:49
S12 8	2	stop adj zone near12 block\$3 near2 (voltage or potential or electric adj field)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:16
S12 9	0	stop adj zone near12 active near12 (on-state or on adj state) near12 (off-state or off adj state)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:18
S13 0	0	stop adj zone near12 active near12 (on-state or on adj state or forward) near12 (off-state or off adj state or reverse)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:19

EAST Search History

S13 1	0	stop adj zone near12 (on-state or on adj state or forward) near12 (off-state or off adj state or reverse)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:20
S13 2	0	stop\$4 adj zone near12 (on-state or on adj state or forward) near12 (off-state or off adj state or reverse)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:22
S13 3	0	stop\$4 adj zone near12 (on-state or on adj state or forward or conduction adj band) near12 (off-state or off adj state or reverse or valence adj band)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:48
S13 4	2	stop\$4 adj zone near12 (gold or au or platinum or pt)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:49
S13 5	10	stop\$4 adj zone near12 (impurities or gold or au or platinum or pt)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 16:51
S13 6	9	stop\$4 adj zone near12 (impurities or gold or au or platinum or pt) and (dopant or doping or impurity or impurities)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 17:04
S13 7	33	(field adj stop\$4 adj zone or buffer) near2 (region or layer) near6 (gold or au or platinum or pt) and silicon and reverse	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 17:12
S13 8	7	(field adj stop\$4 adj zone or buffer) near2 (region or layer) near6 (gold or au or platinum or pt) and silicon and reverse and forward	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 17:13

EAST Search History

S13 9	106	<p>(US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-4062032-\$ or US-3337782-\$ or US-4219829-\$ or US-5574297-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$). did. or (US-5894149-\$ or US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5304821-\$ or US-5306929-\$ or US-5378903-\$ or US-5381026-\$ or US-5381025-\$ or US-5401985-\$ or US-5412228-\$ or US-5444272-\$ or US-5293054-\$ or US-5306930-\$ or US-5407491-\$ or US-5319222-\$ or US-5319221-\$ or US-5336907-\$ or US-5359220-\$ or US-5365477-\$ or US-5371385-\$ or US-4914496-\$ or US-4963972-\$ or US-5068704-\$ or US-5065211-\$ or US-5091766-\$). did. or (US-5679966-\$ or US-5710445-\$ or US-5525816-\$ or US-5569941-\$ or US-5610415-\$ or US-5587594-\$ or US-5637888-\$ or US-5444271-\$ or US-5429953-\$ or US-5461242-\$ or US-5457329-\$ or US-5464994-\$ or US-5471075-\$ or US-5539217-\$ or US-5543639-\$ or US-5528058-\$ or US-5644150-\$ or US-5719413-\$ or US-4717940-\$ or US-5661314-\$ or US-5659185-\$ or US-5684306-\$ or US-RE34158-\$ or US-RE32784-\$ or US-4760431-\$ or US-5477064-\$ or US-5486709-\$). did. or (US-5504351-\$ or US-5705835-\$ or US-5981981-\$ or US-4851889-\$ or US-5498884-\$). did. or (US-20020024056-\$ or US-20010005024-\$).did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04240775-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-03116874-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-01270352-\$).did. or (US-5710445-\$ or DE-3932490-\$ or EP-1017093-\$ or US-4642669-\$ or EP-144876-\$ or EP-1097480-\$ or US-5079175-\$ or DE-19909105-\$). did </p>	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2003/04/14 18:27
4/21/07 H:\Backup_old_East\09761240.wsp	3:42:22 PM				Page 31	

EAST Search History

S14 0	((US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-4062032-\$ or US-3337782-\$ or US-4219829-\$ or US-5574297-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$). did. or (US-5894149-\$ or US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5304821-\$ or US-5306929-\$ or US-5378903-\$ or US-5381026-\$ or US-5381025-\$ or US-5401985-\$ or US-5412228-\$ or US-5444272-\$ or US-5293054-\$ or US-5306930-\$ or US-5407491-\$ or US-5319222-\$ or US-5319221-\$ or US-5336907-\$ or US-5359220-\$ or US-5365477-\$ or US-5371385-\$ or US-4914496-\$ or US-4963972-\$ or US-5068704-\$ or US-5065211-\$ or US-5091766-\$). did. or (US-5679966-\$ or US-5710445-\$ or US-5525816-\$ or US-5569941-\$ or US-5610415-\$ or US-5587594-\$ or US-5637888-\$ or US-5444271-\$ or US-5429953-\$ or US-5461242-\$ or US-5457329-\$ or US-5464994-\$ or US-5471075-\$ or US-5539217-\$ or US-5543639-\$ or US-5528058-\$ or US-5644150-\$ or US-5719413-\$ or US-4717940-\$ or US-5661314-\$ or US-5659185-\$ or US-5684306-\$ or US-RE34158-\$ or US-RE32784-\$ or US-4760431-\$ or US-5477064-\$ or US-5486709-\$). did. or (US-5504351-\$ or US-5705835-\$ or US-5981981-\$ or US-4851889-\$ or US-5498884-\$). did. or (US-20020024056-\$ or US-20010005024-\$). did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$). did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04240775-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-03116874-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-01270352-\$). did. or ((US-5710445-\$ or DE-3932490-\$ or EP-1017093-\$ or US-4642669-\$ or EP-144876-\$ or EP-1097480-\$ or US-5079175-\$ or DE-19909105-\$)). did 1 and stephanie in	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 18:27
4/21/07 3:42:22 PM H:\Backup_old_East\09761240.wsp					Page 32

EAST Search History

S14 1	1189	stephanie.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB .	OR	ON	2003/04/14 18:27
S14 2	61	stephanie.in. and semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 18:28
S14 3	1	stephanie.in. and semiconductor and sulfur	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 18:28
S14 4	2	ep-760528\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 19:28
S14 5	0	de-19832310\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 19:28
S14 6	0	de-019832310\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 19:28
S14 7	219	stephani.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/04/14 19:29
S14 8	109	stephani.in.	DERWENT	OR	ON	2003/04/14 19:29
S14 9	0	stephani.in. and dietrich.in.	DERWENT	OR	ON	2003/04/14 19:31
S15 0	3	buchwald.in. and melvin.in.	US-PGPUB; USPAT; DERWENT	OR	ON	2003/04/14 19:30
S15 1	53	stephani-d.in.	DERWENT	OR	ON	2003/04/14 19:35
S15 2	362	bauer-j.in.	DERWENT	OR	ON	2003/04/14 19:35

EAST Search History

S15 3	2	ep-621640\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/11/07 18:28
S15 4	4	"761240".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/11/07 18:32
S15 5	1	"761240".ap. and stop adj zone and emitter adj region	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/11/07 18:39
S15 6	2	ep-760528\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/11/07 18:39
S15 7	2	ep-760528\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/11/08 11:34
S15 8	21	emitter near12 (stop adj zone junction adj termination)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/11/08 11:41
S15 9	6	emitter near12 (stop adj zone junction adj termination) and (beryllium be zinc zn nickel ni cobalt co magnesium mg tin sn indium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/11/08 12:07

EAST Search History

S16 0	114	(US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5371385-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5407491-\$ or US-5574297-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-5068704-\$ or US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-5202750-\$). did. or (US-5124772-\$ or US-5091766-\$ or US-5306930-\$ or US-5306929-\$ or US-5304821-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5464994-\$ or US-5381025-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-5444271-\$ or US-5429953-\$ or US-5381026-\$ or US-5336907-\$). did. or (US-5461242-\$ or US-5401985-\$ or US-5365477-\$ or US-5378903-\$ or US-3337782-\$ or US-5319222-\$ or US-5319221-\$ or US-5359220-\$ or US-5457329-\$ or US-5444272-\$ or US-5412228-\$ or US-5486709-\$ or US-5498884-\$ or US-5504351-\$ or US-5525816-\$ or US-5528058-\$ or US-5539217-\$ or US-5543639-\$ or US-5659185-\$ or US-5644150-\$ or US-5637888-\$ or US-5610415-\$ or US-5587594-\$ or US-5569941-\$ or US-5719413-\$ or US-5710445-\$ or US-5705835-\$). did. or (US-5684306-\$ or US-5679966-\$ or US-5661314-\$ or US-5477064-\$ or US-5471075-\$). did. or (US-20030197247-\$ or US-20030122151-\$ or US-20010005024-\$ or US-20030094857-\$ or US-20030006497-\$ or US-20020024056-\$). did. or (EP-760528-\$ or EP-621640-\$ or US-5528058-\$ or DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$). did. or (JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$ or JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$). did. or	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2003/11/08 11:52
4/21/07 3:42:22 PM H:\Backup_old_East\09\61\40.wsp					Page 35	

EAST Search History

S16 1	16	power adj semiconductor.ti,ab,clm. and stop adj (layer zone) and emitter	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2003/11/08 11:53
S16 2	51	power adj semiconductor.ti,ab,clm. and stop adj (layer zone)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2003/11/08 12:07
S16 3	20	power adj semiconductor.ti,ab,clm. and stop adj (layer zone) and (beryllium be zinc zn nickel ni cobalt co magnesium mg tin sn indium)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2003/11/08 12:13
S16 4	1562	((257/110) or (257/133) or (257/138) or (257/139) or (257/144) or (257/147) or (257/152) or (257/163) or (257/164) or (257/165) or (257/341) or (257/342)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2003/11/08 12:15
S16 5	10	(((257/110) or (257/133) or (257/138) or (257/139) or (257/144) or (257/147) or (257/152) or (257/163) or (257/164) or (257/165) or (257/341) or (257/342)).CCLS.) and stop adj (layer zone) and (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti)	US-PGPUB; USPAT	OR	OFF	2003/11/08 12:22
S16 6	486	stop adj (layer zone) near15 (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti)	US-PGPUB; USPAT	OR	OFF	2003/11/08 12:22
S16 7	436	stop adj (layer zone) near6 (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/11/08 12:23
S16 8	54	stop adj (layer zone) near6 (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti) and switch\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/11/08 13:47
S16 9	0	WO-0004598\$-.DID.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/11/08 13:47

EAST Search History

S17 0	1	WO-200004598\$-\$ DID.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/11/08 16:38
S17 1	2	de-3917769\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/11/08 16:55
S17 2	1	("6043112").PN.	USPAT; USOCR	OR	OFF	2003/11/08 17:17
S17 3	551	emitter near3 drain and collector near3 source	USPAT	OR	OFF	2003/11/08 17:18
S17 4	460	emitter near3 drain and collector near3 source and bipolar	USPAT	OR	OFF	2003/11/08 17:18
S17 5	268	emitter near3 drain and collector near3 source and bipolar and (switch switching)	USPAT	OR	OFF	2003/11/08 17:19
S17 6	254	emitter near3 drain near6 collector near3 source and bipolar and (switch switching)	USPAT	OR	OFF	2003/11/08 17:19

EAST Search History

S17 7	116	<p>(US-5644150-\$ or US-5637888-\$ or US-5587594-\$ or US-5610415-\$ or US-5569941-\$ or US-5543639-\$ or US-5528058-\$ or US-5539217-\$ or US-5407491-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5659185-\$ or US-5661314-\$ or US-5477064-\$ or US-5471075-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5719413-\$ or US-5710445-\$ or US-4219829-\$ or US-5486709-\$ or US-5461242-\$ or US-5464994-\$ or US-5491351-\$). did. or (US-6441408-\$ or US-5371385-\$ or US-5359220-\$ or US-5365477-\$ or US-3337782-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-5429953-\$ or US-5412228-\$ or US-5381026-\$ or US-5401985-\$ or US-5378903-\$ or US-5381025-\$ or US-5306929-\$ or US-5293054-\$ or US-5245202-\$ or US-5306930-\$ or US-5981981-\$ or US-RE34158-\$ or US-5304821-\$ or US-5336907-\$ or US-5319222-\$). did. or (US-5319221-\$ or US-5202750-\$ or US-5210432-\$ or US-5091766-\$ or US-5124772-\$ or US-5065211-\$ or US-5068704-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4053921-\$ or US-4062032-\$ or US-4032958-\$ or US-5574297-\$ or US-3470036-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$). did. or (US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$). did. or (US-20030122151-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030094857-\$ or US-20020024056-\$ or US-20010005024-\$). did. or (EP-760528-\$ or EP-621640-\$ or DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$). did. or (JP-01270352-\$ or JP-02296370-\$ or JP-06061479-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or 1D-03070176-& or 1D-06151875-&.</p>	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/09 09:51
4/21/07 3:42:22 PM H:\Backup_old_East\09761240.wsp					Page 38	

EAST Search History

S17 8	2	((US-5644150-\$ or US-5637888-\$ or US-5587594-\$ or US-5610415-\$ or US-5569941-\$ or US-5543639-\$ or US-5528058-\$ or US-5539217-\$ or US-5407491-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5659185-\$ or US-5661314-\$ or US-5477064-\$ or US-5471075-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5719413-\$ or US-5710445-\$ or US-4219829-\$ or US-5486709-\$ or US-5461242-\$ or US-5464994-\$ or US-5491351-\$). did. or (US-6441408-\$ or US-5371385-\$ or US-5359220-\$ or US-5365477-\$ or US-3337782-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-5429953-\$ or US-5412228-\$ or US-5381026-\$ or US-5401985-\$ or US-5378903-\$ or US-5381025-\$ or US-5306929-\$ or US-5293054-\$ or US-5245202-\$ or US-5306930-\$ or US-5981981-\$ or US-RE34158-\$ or US-5304821-\$ or US-5336907-\$ or US-5319222-\$). did. or (US-5319221-\$ or US-5202750-\$ or US-5210432-\$ or US-5091766-\$ or US-5124772-\$ or US-5065211-\$ or US-5068704-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4053921-\$ or US-4062032-\$ or US-4032958-\$ or US-5574297-\$ or US-3470036-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$). did. or (US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$). did. or (US-20030122151-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030094857-\$ or US-20020024056-\$ or US-20010005024-\$). did. or (EP-760528-\$ or EP-621640-\$ or DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$). did. or (JP-01270352-\$ or JP-02296370-\$ or JP-06061479-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-06151825-\$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/09 10:18
4/21/07 3:42:22 PM H:\Backup_old_East\09761740.wsd					Page 39	

EAST Search History

S17 9	2	("5455911").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 10:18
S18 0	2	("6455911").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 10:27
S18 1	510	stop adj zone	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 10:27
S18 2	46	stop adj zone.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 11:13
S18 3	23	(acceptor donor) adj ioni?ation adj energ\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 11:36
S18 4	1	(acceptor donor) adj ioni?ation adj energ\$3 near8 (oxygen selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 11:48
S18 5	62	stop adj zone and GaP	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 11:56
S18 6	4	stop adj zone near15 (selenium sulfur oxygen)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 11:59
S18 7	24	stop adj zone and (selenium sulfur oxygen)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 12:06

EAST Search History

S18 8	2	ep-621640\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 12:44
S18 9	2	(acceptor donor) adj ionization adj energ\$3 near4 (silicon "si")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 12:24
S19 0	1	stop adj zone near12 boron	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 12:25
S19 1	0	znse and (stop stopping) adj zone and (nitrogen "N") near15 zone	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 12:46
S19 2	5738	channel adj stop (stop stopping) adj zone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/09 12:51
S19 3	5170	channel adj stop (stop stopping) adj zone and breakdown adj voltage	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/09 12:51
S19 4	5168	channel adj stop (stop stopping) adj zone and breakdown adj voltage and "257"/\$9.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/09 12:52
S19 5	620	(channel adj stop (stop stopping) adj zone) and breakdown adj voltage and "257"/\$9.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/09 12:53
S19 6	0	(channel adj stop (stop stopping) adj zone) and breakdown adj voltage and "257"/\$9.ccls. and znse	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/09 12:53
S19 7	0	"de-1983231.07"\$\$-.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 14:40
S19 8	7	de-1983231\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 14:40

EAST Search History

S19 9	4	"761240".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 14:41
S20 0	881	bauer.in. and stop	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/09 14:41
S20 1	3	bauer.in. and stop adj zone and brunner.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 07:52
S20 2	10	wo-20004598\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 07:54
S20 3	1	wo-200004598\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:09
S20 4	0	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and acceptor adj ioni\$ation adj energ\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:11
S20 5	2	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and ioni\$ation adj energ\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:18
S20 6	978	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (boron Al Ga indium ni nickel oxygen)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:21

EAST Search History

S20 7	700	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt v vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium k sn tin w tungsten pb lead o oxygen iron fe) near12 (doping doped impurity impurities)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:30
S20 8	679	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt v vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium k sn tin w tungsten pb lead o oxygen iron fe) near12 (doping doped impurity impurities) and silicon	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:30
S20 9	586	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt v vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium k sn tin w tungsten pb lead o oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:33
S21 0	581	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb lead oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:34

EAST Search History

S21 1	568	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:36
S21 2	110	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 09:23
S21 3	8	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter and power.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 08:41

EAST Search History

S21 4	5	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter and power.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 09:07
S21 5	5	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury se selenium sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter and power.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 09:10
S21 6	0	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (ni nickel se selenium cu copper tellurium te oxygen iron fe) near12 (doping doped impurity impurities) and germanium and "257"/\$9.ccls. and emitter and power.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 09:13
S21 7	1	((stop stopping) adj (layer zone region) channel adj stop) near12 (doped doping impurity impurities) and (ni nickel se selenium cu copper tellurium te oxygen iron fe cr chromium) near12 (doping doped impurity impurities) and germanium and "257"/\$9.ccls. and emitter and power.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 09:17
S21 8	2	de-3917769\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:07

EAST Search History

S21 9	110	((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten te tellurium pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 15:44
S22 0	68	(stop stopping) adj (layer zone) and thyristor.ti,ab,clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 15:57
S22 1	68	(stop stopping) adj (layer zone) and thyristor.ti,ab,clm. and (stop stopping)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 18:02
S22 2	5469	GTO	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 18:04
S22 3	4	"761240".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:26
S22 4	0	de-19832310\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:27
S22 5	0	de-019832310\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:27
S22 6	0	("761240.ap.").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:46

EAST Search History

S22 7	4	"761240".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:46
----------	---	--------------	---	----	-----	------------------

EAST Search History

S22 8	134	(US-5796124-\$ or US-5844258-\$ or US-5319222-\$ or US-5319221-\$ or US-5668385-\$ or US-5719413-\$ or US-5705835-\$ or US-5710445-\$ or US-6043112-\$ or US-5682044-\$ or US-6441408-\$ or US-6660569-\$ or US-6703294-\$ or US-6696705-\$ or US-5793066-\$ or US-5202750-\$ or US-5245202-\$ or US-5293054-\$ or US-5306929-\$ or US-5306930-\$ or US-5981981-\$ or US-RE34158-\$ or US-5304821-\$ or US-4032958-\$ or US-4062032-\$ or US-4053921-\$). did. or (US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5068704-\$ or US-5065211-\$ or US-5124772-\$ or US-5091766-\$ or US-5210432-\$ or US-5574297-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$). did. or (US-5336907-\$ or US-5461242-\$ or US-5444272-\$ or US-5457329-\$ or US-5444271-\$ or US-5429953-\$ or US-5412228-\$ or US-5381026-\$ or US-5401985-\$ or US-5378903-\$ or US-5381025-\$ or US-3470036-\$ or US-3337782-\$ or US-5365477-\$ or US-5371385-\$ or US-5359220-\$ or US-5464994-\$ or US-5543639-\$ or US-5528058-\$ or US-5539217-\$ or US-5407491-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5679966-\$ or US-5684306-\$ or US-5486709-\$). did. or (US-5491351-\$ or US-5477064-\$ or US-5569941-\$ or US-5471075-\$ or US-5610415-\$ or US-5659185-\$ or US-5644150-\$ or US-5637888-\$ or US-4219829-\$ or US-5661314-\$ or US-5587594-\$). did. or (US-20030122151-\$ or US-20030197247-\$ or US-2003006497-\$ or US-20030094857-\$ or US-20040084724-\$ or US-20040137665-\$ or US-20040080015-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20010005024-\$). did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or DE-3837743-\$ or	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/10 20:53
4/21/07 3:42:22 PM H:\Backup_old_East\09761241.wsd					Page 48	

EAST Search History

S22 9	442	((257/107) or (257/155) or (257/156)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/08/10 20:53
S23 0	616	((257/107) or (257/109) or (257/110) or (257/155) or (257/156)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/08/11 09:52
S23 1	0	(((257/107) or (257/109) or (257/110) or (257/155) or (257/156)).CCLS.) and ion\$ation adj energ\$3 near15 (stop stopping) adj (zone region layer)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:56
S23 2	1	(((257/107) or (257/109) or (257/110) or (257/155) or (257/156)).CCLS.) and (sulfur s selenium se oxygen tellurium te zn zinc mn manganese ioni\$ation adj energ\$3) near15 (stop stopping) adj (zone region layer)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 20:58
S23 3	0	("DOPANTNEAR4SULFURNEAR12SI LICON").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/08/10 21:14
S23 4	95	sulfur near12 (impurities impurity ion adj implantation) and silicon adj substrate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 21:15
S23 5	60	sulfur near4 (impurities impurity ion adj implantation) and silicon adj substrate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 21:15
S23 6	774	((257/107) or (257/109) or (257/110) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/08/11 09:56
S23 7	799	((257/107) or (257/109) or (257/110) or (257/155) or (257/156) or (257/163) or (257/164) or (257/165)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/08/11 09:58
S23 8	972	((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164) or (257/165)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/08/11 09:58

EAST Search History

S23 9	44	((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164) or (257/165)).CCLS.) and (deep ionization adj energ\$3) near6 (dop\$3 impurit\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/11 10:01
S24 0	7	"761241".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/11 10:27

EAST Search History

S24 1	174	(US-5429953-\$ or US-5412228-\$ or US-5401985-\$ or US-5381026-\$ or US-5381025-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5359220-\$ or US-5336907-\$ or US-5319222-\$ or US-5319221-\$ or US-5306930-\$ or US-5306929-\$ or US-5304821-\$ or US-5293054-\$ or US-5684306-\$ or US-5679966-\$ or US-5668385-\$ or US-5661314-\$ or US-5543639-\$ or US-5719413-\$ or US-5710445-\$ or US-5705835-\$ or US-5569941-\$ or US-5587594-\$). did. or (US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5539217-\$ or US-5528058-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5491351-\$ or US-5486709-\$ or US-5477064-\$ or US-5471075-\$ or US-5464994-\$ or US-5461242-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-3470036-\$ or US-3337782-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5684323-\$ or US-5407491-\$ or US-5574297-\$ or US-6313485-\$). did. or (US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-5936267-\$ or US-6111278-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$ or US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$). did. or (US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-6660569-\$ or US-6441408-\$ or US-5682044-\$ or US-6043112-\$ or US-5629535-\$ or US-5757033-\$ or US-6049108-\$ or US-6104043-\$ or US-6242766-\$ or US-6268639-\$ or US-6274892-\$ or US-6380569-\$ or US-6407412-\$ or US-6420774-\$ or US-6437383-\$ or US-6501099-\$ or US-6555848-\$ or US-6703647-\$ or US-6734462-\$ or US-6756612-\$ or US-6696705-\$). did. or -(US-6703294-\$ or US-3577046-\$ or US-3697827-\$ or US-3739236-\$ or US-3988771-\$ or IIS-4040170-\$ or IIS-4081818-\$ or 4/21/07 3:42:22 PM H:\Backup_old_East\09761240.wsd	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/08/11 10:28
4/21/07 3:42:22 PM H:\Backup_old_East\09761240.wsd					Page 51	

EAST Search History

S24 2	24	((US-5429953-\$ or US-5412228-\$ or US-5401985-\$ or US-5381026-\$ or US-5381025-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5359220-\$ or US-5336907-\$ or US-5319222-\$ or US-5319221-\$ or US-5306930-\$ or US-5306929-\$ or US-5304821-\$ or US-5293054-\$ or US-5684306-\$ or US-5679966-\$ or US-5668385-\$ or US-5661314-\$ or US-5543639-\$ or US-5719413-\$ or US-5710445-\$ or US-5705835-\$ or US-5569941-\$ or US-5587594-\$). did. or (US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5539217-\$ or US-5528058-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5491351-\$ or US-5486709-\$ or US-5477064-\$ or US-5471075-\$ or US-5464994-\$ or US-5461242-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-3470036-\$ or US-3337782-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5684323-\$ or US-5407491-\$ or US-5574297-\$ or US-6313485-\$). did. or (US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-5936267-\$ or US-6111278-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$ or US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$). did. or (US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-6660569-\$ or US-6441408-\$ or US-5682044-\$ or US-6043112-\$ or US-5629535-\$ or US-5757033-\$ or US-6049108-\$ or US-6104043-\$ or US-6242766-\$ or US-6268639-\$ or US-6274892-\$ or US-6380569-\$ or US-6407412-\$ or US-6420774-\$ or US-6437383-\$ or US-6501099-\$ or US-6555848-\$ or US-6703647-\$ or US-6734462-\$ or US-6756612-\$ or US-6696705-\$). did. or (US-6703294-\$ or US-3577046-\$ or US-3697827-\$ or US-3739236-\$ or US-3988771-\$ or IIS-4040170-\$ or IIS-4081818-\$ or	EPO; DERWENT	OR	OFF	2004/08/11 10:29
4/21/07 3:42:22 PM H:\Backup_old_East\09761241.wsp					Page 52	

EAST Search History

S27 3	2	"5668385".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/20 10:49
S27 4	2	de-3917769\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/20 09:33
S27 5	1380	((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/20 10:50
S27 6	0	S275 and stop adj zone near8 temperature near8 threshold	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/20 10:51
S27 7	0	S275 and emitter near8 temperature near8 threshold	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/20 10:51
S27 8	11	"5668385"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/03 19:18
S27 9	2	("5668385").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/03 19:20
S28 0	2	de-3917769\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/04 22:39
S28 1	2	("4910573").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/03 19:23
S28 2	1429	((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/04 22:41

EAST Search History

S28 3	92	S282 and emitter and (power high-voltage high adj voltage) and (gto mct igbt) and (selenium se s sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/04 22:44
S28 4	4	S282 and emitter and (power high-voltage high adj voltage) and (gto mct igbt) and (selenium se) and sulfur	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/02/04 22:44
S28 5	6	"761240".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:31
S28 6	1	(US-20010005024-\$).did.	US-PGPUB	OR	OFF	2006/07/18 17:31
S28 7	1	(US-20010005024-\$).did.	US-PGPUB	OR	OFF	2006/07/18 17:32
S28 8	1	S287 and active	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/18 17:37
S28 9	27	stop adj zone same (se selenium sulfur s)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/18 17:37
S29 0	34	stop adj zone same (se selenium sulfur s)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:37
S29 1	9	stop adj zone same (se selenium sulfur s) and power near1 semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:39
S29 2	0	stop adj zone same (se selenium sulfur s) and power near1 semiconductor and @ad<"19980718"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:40
S29 3	0	stop adj zone same (se selenium sulfur s) and power near1 semiconductor and @ad<"19990706"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:42

EAST Search History

S29 4	0	stop adj zone same (se selenium sulfur s band adj gap) and power near1 semiconductor and @ad<"19990706"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:42
S29 5	0	stop adj zone same (se selenium sulfur s band adj gap energy adj gap) and power near1 semiconductor and @ad<"19990706"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:42
S29 6	0	stop adj zone same (se selenium sulfur s band adj gap energy adj gap band adj energy) and power near1 semiconductor and @ad<"19990706"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:43
S29 7	68	stop adj zone.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:44
S29 8	4	stop adj zone.ti. and dopant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:48
S29 9	1	wo-200004598\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 17:53
S30 0	2	de-3917769\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 11:23
S30 1	0	ep-0760528\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 18:02
S30 2	0	ep-07060528\$-\$ did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/18 18:02
S30 3	2	("5668385").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 07:52

EAST Search History

S30 4	617	stop adj zone	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 08:17
S30 5	61	stop adj zone.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 08:17
S30 6	61	stop adj zone.ti. and stop adj zone	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 08:18
S30 7	18	stop adj zone.ti. and stop adj zone and (doping doped dopant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 08:19
S30 8	14	stop adj zone.ti. and stop adj zone and (doping doped dopant) and (se s)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 08:19
S30 9	4	stop adj zone.ti. and stop adj zone and (doping doped dopant) and (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 08:22
S31 0	10	stop adj zone.ti,ab,clm. and stop adj zone and (doping doped dopant) and (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 08:26
S31 1	4	power near3 semiconductor.ti,ab, clm. and stop adj zone and (doping doped dopant) and (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 08:27
S31 2	2	power near3 (transistor thyristor IGBT).ti,ab,clm. and stop adj zone and (doping doped dopant) and (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 08:28
S31 3	4	power near3 (transistor thyristor IGBT).ti,ab,clm. and stop adj zone and (doping doped dopant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 08:39

EAST Search History

S31 4	70	semiconductor and stop adj zone and (doping doped dopant)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 08:39
S31 5	3	semiconductor and stop adj zone and (doping doped dopant) and valence adj band	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 08:41
S31 6	8	semiconductor and stop adj zone and (doping doped dopant) and selenium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/19 09:59
S31 8	1768	((257/107) or (257/109) or (257/110) or (257/147) or (257/148) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 11:24
S31 9	3	S318 and energy adj level near4 (band adj gap energy adj gap)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 11:26
S32 0	8	S318 and stop adj zone	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/19 11:26
S32 1	1	(US-20010005024-\$).did.	US-PGPUB	OR	OFF	2006/10/03 16:35
S32 2	1	(US-20010005024-\$).did. and active near10 (stop adj zone)	US-PGPUB	OR	ON	2006/10/03 16:35
S32 3	2	("5668385").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/10 17:17
S32 4	0	("de-39177769\$-\$ did.").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/10 17:18

EAST Search History

S32 5	227	(US-20010005024-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20030006497-\$ or US-20030197247-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20040084724-\$ or US-20040080015-\$ or US-20040137665-\$).did. or (US-5065211-\$ or US-4910573-\$ or US-4581626-\$ or US-5005065-\$ or US-4954869-\$ or US-5359220-\$ or US-5306930-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5381025-\$ or US-5381026-\$ or US-5401985-\$ or US-5429953-\$ or US-5412228-\$ or US-5444271-\$ or US-5319221-\$ or US-5444272-\$ or US-5457329-\$ or US-5461242-\$ or US-5464994-\$ or US-5319222-\$ or US-5471075-\$ or US-5477064-\$ or US-5486709-\$ or US-5491351-\$). did. or (US-5202750-\$ or US-5245202-\$ or US-5241194-\$ or US-5504351-\$ or US-5525816-\$ or US-5528058-\$ or US-5539217-\$ or US-5543639-\$ or US-5498884-\$ or US-5291040-\$ or US-5569941-\$ or US-5068704-\$ or US-5083185-\$ or US-5610415-\$ or US-5619047-\$ or US-5659185-\$ or US-5661314-\$ or US-5587594-\$ or US-5637888-\$ or US-5644150-\$ or US-5668385-\$ or US-5679966-\$ or US-5710445-\$ or US-5719411-\$ or US-4243999-\$ or US-5684306-\$ or US-5306929-\$). did. or (US-5719413-\$ or US-5311042-\$ or US-5698867-\$ or US-5705835-\$ or US-4958211-\$ or US-3337782-\$ or US-4089024-\$ or US-5296725-\$ or US-4851889-\$ or US-4032958-\$ or US-3577046-\$ or US-RE32784-\$ or US-4963972-\$ or US-5304821-\$ or US-5017992-\$ or US-5210432-\$ or US-4914496-\$ or US-4717940-\$ or US-5981981-\$ or US-5132767-\$ or US-5315134-\$ or US-5091766-\$ or US-5751023-\$ or US-5428230-\$ or US-5144401-\$ or US-4868636-\$ or US-5111268-\$). did. or (US-5345095-\$ or US-5336907-\$ or US-3470036-\$ or US-4977438-\$ or US-4951109-\$ or US-6756612-\$ or US-6703647-\$ or US-6555848-\$ or US-6472693-\$ or US-6437383-\$ or US-6420774-\$ or US-6407412-\$ or US-5144400-\$ or US-6380560-\$ or US-6274897-\$ or	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 17:36
4/21/07 3:42:22 PM H:\Backup_old_East\09761240.wsp					Page 58	

EAST Search History

S32 6	2	S325 and gerstenmaier.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 18:01
S32 7	18	stop adj (region zone layer film) near4 (selenium sulfur ev mev)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 18:08
S32 8	62	stop adj (region zone layer film) near4 (selenium sulfur ev mev band adj gap energy adj gap)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:18
S32 9	8	hole adj injection adj stop adj (zone region layer film)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:20
S33 0	187	field adj stop adj (film layer zone region)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:21
S33 1	26	field adj stop adj (film layer zone region) and thyristor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:21
S33 2	57	field adj stop adj (film layer zone region) and (emitter thyristor)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:21
S33 3	28	field adj stop adj (film layer zone region) near10 (emitter thyristor)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:22
S33 4	3	field adj stop adj (film layer zone region) near10 (emitter thyristor) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:26
S33 5	3	field adj stop adj (film layer zone region) near10 (emitter thyristor scr) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:27
S33 6	3	field adj stop adj (film layer zone region) near10 (emitter thyristor scr rectifier) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:27
S33 7	3	field adj stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:28

EAST Search History

S33 8	3	((hole adj injection) field) adj stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:29
S33 9	3	((hole adj injection) field) near4 stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:29
S34 0	3	((hole adj injection) field) with stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 18:30
S34 1	3	((hole adj injection) field) near20 stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 19:04
S34 2	9	fs-igbt	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/11/10 19:05

EAST Search History

S34 3	232	(US-20010005024-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20030006497-\$ or US-20030197247-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20040084724-\$ or US-20040080015-\$ or US-20040137665-\$ or US-20060244060-\$ or US-20020094597-\$ or US-20060006459-\$ or US-20050045945-\$ or US-20050029589-\$).did. or (US-5065211-\$ or US-4910573-\$ or US-4581626-\$ or US-5005065-\$ or US-4954869-\$ or US-5359220-\$ or US-5306930-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5381025-\$ or US-5381026-\$ or US-5401985-\$ or US-5429953-\$ or US-5412228-\$ or US-5444271-\$ or US-5319221-\$ or US-5444272-\$ or US-5457329-\$ or US-5461242-\$ or US-5464994-\$ or US-5319222-\$ or US-5471075-\$ or US-5477064-\$ or US-5486709-\$ or US-5491351-\$). did. or (US-5202750-\$ or US-5245202-\$ or US-5241194-\$ or US-5504351-\$ or US-5525816-\$ or US-5528058-\$ or US-5539217-\$ or US-5543639-\$ or US-5498884-\$ or US-5291040-\$ or US-5569941-\$ or US-5068704-\$ or US-5083185-\$ or US-5610415-\$ or US-5619047-\$ or US-5659185-\$ or US-5661314-\$ or US-5587594-\$ or US-5637888-\$ or US-5644150-\$ or US-5668385-\$ or US-5679966-\$ or US-5710445-\$ or US-5719411-\$ or US-4243999-\$ or US-5684306-\$ or US-5306929-\$). did. or (US-5719413-\$ or US-5311042-\$ or US-5698867-\$ or US-5705835-\$ or US-4958211-\$ or US-3337782-\$ or US-4089024-\$ or US-5296725-\$ or US-4851889-\$ or US-4032958-\$ or US-3577046-\$ or US-RE32784-\$ or US-4963972-\$ or US-5304821-\$ or US-5017992-\$ or US-5210432-\$ or US-4914496-\$ or US-4717940-\$ or US-5981981-\$ or US-5132767-\$ or US-5315134-\$ or US-5091766-\$ or US-5751023-\$ or US-5428230-\$ or US-5144401-\$ or US-4868636-\$ or US-5111268-\$). did. or (US-5345095-\$ or US-5336907-\$ or US-3470036-\$ or US-4077428-\$ or US-4051100-\$ or	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 19:38
4/21/07 3:42:22 PM H:\Backup_old_East\09761240.wsp					Page 61	

EAST Search History

S34 4	24	S343 and (band adj gap selenium sulfur carbon barium manganese)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 21:49
S34 5	2	S343 and GTO adj thyristor near10 ((silicon Si))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 21:51
S34 6	0	S343 and GTO adj thyristor near20 ((silicon Si) near4 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 21:51
S34 7	17	S343 and GTO adj thyristor and ((silicon Si) near4 substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 23:06
S34 8	1500	thyristor near3 scr	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/11/10 23:07
S34 9	889	thyristor near3 scr	USPAT	OR	OFF	2006/11/10 23:07
S35 0	114	thyristor near3 scr and silicon.ti,ab,clm.	USPAT	OR	OFF	2006/11/10 23:08
S35 1	3	gto adj thyristor near3 scr and silicon.ti,ab,clm.	USPAT	OR	OFF	2006/11/10 23:08
S35 2	3	gto adj thyristor.ti. and silicon.ti,ab,clm.	USPAT	OR	OFF	2006/11/10 23:43
S35 3	0	wo-0004598\$-\$ did.	USPAT	OR	OFF	2006/11/10 23:43
S35 4	1	wo-200004598\$-\$ did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/10 23:43
S35 5	0	wo-0004598\$-\$ did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/10 23:44
S35 6	1	wo-200004598\$-\$ did.	EPO; DERWENT	OR	OFF	2007/04/21 15:38
S35 7	0	257/107	EPO; DERWENT	OR	OFF	2006/11/10 23:52

EAST Search History

S35 8	0	257/109	EPO; DERWENT	OR	OFF	2006/11/10 23:52
S35 9	0	257/110	EPO; DERWENT	OR	OFF	2006/11/10 23:52
S36 0	0	257/137	EPO; DERWENT	OR	OFF	2006/11/10 23:52
S36 1	0	257/138	EPO; DERWENT	OR	OFF	2006/11/10 23:52
S36 2	0	57/147	EPO; DERWENT	OR	OFF	2006/11/10 23:52
S36 3	0	57/148	EPO; DERWENT	OR	OFF	2006/11/10 23:52
S36 4	1781	((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/147) or (257/148) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/10 23:53
S36 5	0	S364 and thyristor and amphoteric and asymmetric\$2	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/11 00:07
S36 6	1	S364 and thyristor and amphoteric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/11 00:07
S36 7	1	band adj gap.clm. and energy adj level.clm. and (semiconductor silicon).ti,ab,clm. and (mev ev).clm. and (field adj stop FS-IGBT stop adj zone).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/11/11 00:07
S36 8	1	band adj gap.clm. and energy adj level.clm. and (semiconductor silicon).ti,ab,clm. and (mev ev).clm. and (field adj stop FS-IGBT stop adj zone).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 00:07
S36 9	0	S364 and thyristor and amphoteric and asymmetric\$2	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 00:07
S37 0	1	S364 and thyristor and amphoteric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/11 00:07

EAST Search History

S37 1	2	"5610415".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/21 13:12
S37 2	0	ep-0760528\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/21 13:12
S37 3	0	ep-0760528\$-\$did.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/21 13:12

EAST Search History

S37 4	233	(US-20060244060-\$ or US-20020094597-\$ or US-20060006459-\$ or US-20050045945-\$ or US-20050029589-\$ or US-20010005024-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20030197247-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20030006497-\$ or US-20040137665-\$ or US-20040080015-\$ or US-20040084724-\$).did. or (US-4963972-\$ or US-5365477-\$ or US-5017992-\$ or US-4717940-\$ or US-4032958-\$ or US-5412228-\$ or US-5336907-\$ or US-5684306-\$ or US-5710445-\$ or US-5587594-\$ or US-5091766-\$ or US-5486709-\$ or US-5359220-\$ or US-5005065-\$ or US-5591991-\$ or US-4760431-\$ or US-RE34158-\$ or US-4958211-\$ or US-5684323-\$ or US-RE32784-\$ or US-5210432-\$ or US-5719411-\$ or US-5241194-\$ or US-5705835-\$ or US-5698867-\$ or US-5245202-\$). did. or (US-5679966-\$ or US-5668385-\$ or US-5644150-\$ or US-5610415-\$ or US-5569941-\$ or US-5304821-\$ or US-4062032-\$ or US-5543639-\$ or US-5539217-\$ or US-5528058-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5477064-\$ or US-5444272-\$ or US-5317171-\$ or US-5444271-\$ or US-5471075-\$ or US-5464994-\$ or US-5461242-\$ or US-5429953-\$ or US-5083185-\$ or US-5661314-\$ or US-5659185-\$ or US-4914496-\$ or US-5491351-\$ or US-5457329-\$). did. or (US-4053921-\$ or US-3577046-\$ or US-3739236-\$ or US-5065211-\$ or US-5306930-\$ or US-5296725-\$ or US-5381026-\$ or US-5981981-\$ or US-4868636-\$ or US-4581626-\$ or US-4089024-\$ or US-5202750-\$ or US-5637888-\$ or US-5428230-\$ or US-5319221-\$ or US-4851889-\$ or US-3470036-\$ or US-5068704-\$ or US-5291040-\$ or US-5294816-\$ or US-5293054-\$ or US-4954869-\$ or US-5719413-\$ or US-5144400-\$ or US-5132767-\$ or US-5124772-\$ or US-5144401-\$). did. or (US-5111268-\$ or US-5619047-\$ or US-4977438-\$ or US-4951109-\$ or US-6756612-\$ or	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/04/21 13:14
4/21/07 3:42:22 PM H:\Backup_old_East\09761240.wsp					Page 65	

EAST Search History

S37 5	22	S374	EPO; DERWENT	OR	OFF	2007/04/21 13:48
S37 6	0	de-19832310\$-\$ did.	EPO; DERWENT	OR	OFF	2007/04/21 13:49
S37 7	0	de-19832310\$-\$ did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/21 14:32
S37 8	0	de-9810332310\$-\$ did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/21 14:32
S37 9	0	de-199810332310\$-\$ did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/21 15:35